

## CLAIMS

1. An apparatus for beating and rolling a food dough belt conveyed between rolling members, comprising a first rolling member having a plurality of rolling rollers which move sequentially upstream from downstream or downstream from upstream along the food dough belt, while each rolling roller is rotating on its own axis, a second rolling member conveying the food dough belt thereon, and a control apparatus for controlling the moving speed and direction and the rotating speed and direction, of the rolling rollers.
2. An apparatus according to claim 1, wherein the peripheral speed  $V_3$  of the rolling roller is made to be equal to or almost equal to the surface speed of the food dough belt by the control apparatus.
3. An apparatus according to claim 1, wherein the first rolling member comprises a planetary-roller mechanism or a planetary-gear mechanism.
4. An apparatus according to claim 1, wherein the second rolling member comprises a conveying roller with a larger diameter than that of the rolling roller.
5. An apparatus according to claim 1, wherein the second rolling member includes a conveying roller and a supplying conveyer, and therebetween a space is arranged for releasing gas from the lower part of the food dough belt.
6. An apparatus according to claim 1, wherein the vertical surface passing through the central axis of the first rolling member is arranged upstream of the vertical surface that passes through the central axis of the second rolling member.

7. A method for beating and rolling a food dough belt which is conveyed in accordance with a plurality of rolling rollers which move sequentially upstream from downstream or downstream from upstream along the food dough belt, while each rolling roller rotates on its own axis, characterized by controlling the number of beats by changing the moving speed  $V_1$  of the rolling roller, and making the peripheral speed of the rolling roller equal to or almost equal to the surface speed of the food dough belt by changing the rotating speed  $V_2$  of the rolling roller.